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THE ARMY WARRANT OFFICER CAREER  
TOWARD MANAGER OR TECHNICIAN

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The The Army Warrant Officer Career: Toward Manager or Technician?

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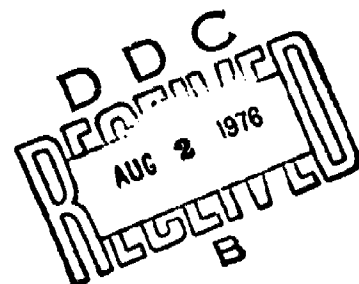
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This study looks at the warrant officer career program as designed and used, and finds that the Warrant Officer Senior Course seems to continue the thread of more and more generalized education for warrant officers.

This study recommends that the Warrant Officer Senior Course be eliminated as it is training technical specialists for general management positions.

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MASTER OF MILITARY ART AND SCIENCE

by

BRADFORD M. BROWN, CPT, USA  
BS, University of Tampa

Fort Leavenworth, Kansas  
1976

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MASTER OF MILITARY ART AND SCIENCE

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The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent those of either the U.S. Army Command and General Staff College or any other governmental agency.)



## LIST OF ILLUSTRATIONS

WARRANT OFFICER STRENGTH . . . . .	13
WARRANT OFFICER TRAINING MODEL . . . . .	25
AVIATION WARRANT OFFICER ADVANCED . . . . .	27
COURSE GENERAL SUBJECT AREAS	
EDUCATIONAL LEVELS OF WARRANT OFFICERS . . . . .	28
SENIOR COURSE SELECTIONS BY BRANCH . . . . .	29
ACADEMIC HOURS IN WARRANT OFFICER . . . . .	31
SENIOR COURSE	

## TABLE OF CONTENTS

ABSTRACT . . . . .	ii
THESIS APPROVAL PAGE . . . . .	iii
LIST OF ILLUSTRATIONS. . . . .	iv
CHAPTER 1    INTRODUCTION . . . . .	1
Problem . . . . .	1
Purpose . . . . .	2
Methodology . . . . .	3
Summary . . . . .	4
CHAPTER 2    THE EVOLUTION OF THE ARMY WARRANT OFFICER . . . . .	7
Background . . . . .	7
Warrant Officer Status . . . . .	8
Summary . . . . .	15
CHAPTER 3    CAREER PATTERNS . . . . .	18
Background . . . . .	18
Career Development Phases . . . . .	18
Special Case - Aviation Model . . . . .	19
Assignments . . . . .	21
Summary . . . . .	22
CHAPTER 4    MILITARY TRAINING PROGRAMS . . . . .	24
Background . . . . .	24
Warrant Officer Advanced Courses . . . . .	26
Warrant Officer Senior Course . . . . .	29
Summary . . . . .	33

CHAPTER 5	CONCLUSIONS AND RECOMMENDATIONS. . . . .	36
	Conclusions. . . . .	37
	Recommendations . . . . .	37
APPENDIX A	WARRANT OFFICER MOS TITLES . . . . .	.A-1
APPENDIX B	WARRANT OFFICER CAREER PATTERNS. . . . .	.B-1
APPENDIX C	MILITARY TRAINING PROGRAMS . . . . .	.C-1
APPENDIX D	SELECTED BIBLIOGRAPHY . . . . .	.D-1

"The trouble with training today is very simple -- by and large it is ineffectual, if not farcical.

"Despite all of the claims by trainers, and the 'voluntary' testimonials of trainees, business executives and professional experts -- there is little, if any evidence that what today passes for training has had any salutary effect on those who have been subjected to it. And, at last, it looks as if training is in trouble. It looks as though it is going to have to begin to justify itself on the basis of the results it achieves -- upon the basis of the payoff on the investment made."

Donald A. Young  
President, Sterling Institute  
Canada Limited, Toronto

## CHAPTER 1

### INTRODUCTION

#### THE PROBLEM

The Army's success in combat depends to a striking degree upon a small group of men and women who work as technicians. Technological changes affect the armed forces as they do modern industry. Advances in electronics, mechanics, computers, lasers, and jet turbine engines require the services of a wide variety of technicians to operate and maintain complex equipment in the military services and in industry.

Mortar squads at the front lines depend upon radar teams to spot the location of enemy artillery and mortar units. Tank crews rely on sophisticated electronic devices to see the enemy during periods of reduced visibility.

Although technical occupations have grown very rapidly since World War II, the term "technician" has no generally accepted definition.<sup>1</sup> Employees use it to refer to workers doing technical skills including those who generally work with engineers and scientists. A sizeable segment of management in industry does not appear to understand the proper place of the technician.<sup>2</sup> He

is often thought of as a second rate engineer or a craftsman with tenure. Engineering technology education, for example, is regarded as having been designed for students who are academically inferior to their university counterparts.

The technician in the United States Army is basically defined as a highly skilled person who is neither enlisted nor commissioned. He holds the rank and status of warrant officer. The vagueness of the position of the warrant officer technician in the Army structure is beginning to create a situation whereby the difference between the commissioned officer (manager) and the warrant officer (technician) is becoming indefinable.

The present education system further complicates this problem by training warrant officer technicians for general management type positions.

#### PURPOSE

This paper will focus on the evolution of the Army warrant officer, assess the adequacy and appropriateness of his current education system and make recommendations on how this system may be improved.

The warrant officer technician has received little attention in the past, as is emphasized by the fact not one student monograph or paper in the Library

of the Command and General Staff College deals directly with this most vital asset. It is hoped that this paper will stimulate thought and generate discussion concerning the warrant officer, his education system, and his role in the United States Army.

### METHODOLOGY

The status of the warrant officer from inception to present is described to illustrate how the identity of the technician has changed from "reward" for enlisted service to a distinctly separate and specialized part of the Army team.

Career patterns and training programs are addressed to the extent necessary to emphasize what training is required to perform in a particular military occupational specialty.

The best way to assess an education system or training program is to examine how well the graduate performs on the job. In the case of warrant officer occupational training this is an easy job. One only has to evaluate the results to ascertain if the required tasks have been performed.

However, in the general educational development courses, this simple analysis cannot be made. Many authors differ on the value of such education, since no yardstick

has been developed to judge the value of the so-called "soft skill" courses. This paper will view the general educational development courses presented to Army warrant officers in light of the positions warrant officers can normally expect to hold.

It is believed that the Warrant Officer Corps in the Army is not currently subject to serious challenge,<sup>3</sup> therefore this study does not challenge present warrant officer specialities.

Extensive literature search was made in an effort to evaluate current thinking in the development and utilization of technicians. Use of articles in military journals and the author's experience as a senior instructor at the Warrant Officer Career College is reflected throughout the paper.

The author became interested in the Warrant Officer Senior Course after reading several student comments which generally argued that no greater job opportunities existed for a Senior Course Graduate than for any warrant fully qualified in his job. Several informal interviews were conducted in conjunction with this study. Most agreed that the course was inconvenient to attend and that no tangible career benefit existed, except that consideration for promotion might be weighted in favor of graduates over non-graduates.

Formal interviews and job task analysis were not used in this study owing to the extensive task analysis



of "skill" type courses required by the Training and Doctrine Command (TRADOC). It was felt that job descriptions and career progression patterns are adequately described in Department of Army Pamphlet 600-11 and that these patterns are a true reflection of actual career patterns.

#### SUMMARY

The Army warrant officer is a highly specialized technician, who like his civilian counterpart, is not completely understood. Management of warrant officers in the past has endeavored to make the best use of unique talents and capabilities.

The remaining chapters will examine the warrant officer from inception to present, review his career progression and training, and make recommendations on how the system might be improved.

## CHAPTER 1

### FOOTNOTES

<sup>1</sup>US Department of Labor. Bureau of Labor Statistics. Occupational Outlook Handbook 1974-1975 Edition, p. 387.

<sup>2</sup>Torpey, William G. Optimum Utilization of Scientific and Engineering Manpower, p. 109. Dr. Torpey's ideas concerning the proper use of the technician are based on many years of military, federal and civilian experience.

<sup>3</sup>US Department of the Army. Office of Personnel Operations. Report-Army Warrant Officer Career Program. P. 54. This report is a primary source for many of the concepts and policy in this paper. (Hereinafter referred to as the "Warrant Officer Report")

## CHAPTER 2

### THE EVOLUTION OF THE ARMY WARRANT OFFICER

#### BACKGROUND

The warrant officer in the United States Army has historically and traditionally been a highly specialized technician. The first Army warrant officers were officers in the mine planter service of the Coast Artillery and served as masters, mates and chief engineers. Public law in 1916 established warrant officers as separate and distinct from the officer and enlisted ranks. Two warrant officer pay grades were established in 1918 and in 1920 over one thousand warrant officer spaces were authorized. This number did not include bandsmen and members of the mine planter service who were fixed at 70. By 1926 Congress reduced this space authorization to approximately 600. The 1930s brought a reevaluation of the grade and it was generally held that the rank of warrant officer was a reward for outstanding performance to noncommissioned officers who were too old for a commission. Additionally, this grade was not justified by organizational needs but was deemed justifiable solely on a reward basis. During World War II, warrant officers were managed on a decentralized basis with inconsistent practices and

little supervision from the War Department.<sup>1</sup> Due to this lack of supervision, the exact numbers of warrant officers and their specialties during this time were never recorded.<sup>2</sup> Because of the connotation of "reward" for outstanding performance of duty, no career development patterns existed for the Warrant Officer Corps at this time. Following World War II, an incentive concept was adopted which was based on the idea of capping each enlisted career field with a warrant officer position. In 1948 both reserve and regular warrant officers served on active duty, and in 1949 an additional pay grade was established. This pay grade structure remains basically the same today: WO-1, CWO-2, CWO-3 and CWO-4.

Following the Korean War and concept of the warrant officer in the Army was changed from the "reward" and "incentive" concept.

#### WARRANT OFFICER STATUS

"The legal status of the category of Army personnel having the rank and precedence of warrant officer has been established by legislation and Army regulation. Section 101 (16), Title 10, US Code defines grade as "...a step or degree in a graduated scale of office or military rank..." and further defines rank as "...the order of precedence among members of the armed forces. Sections 555, 597, and 3448, Title 10, establish warrant

officers as integral to the Army. Section 3548, Title 10, prescribes that a warrant officer "...may be assigned to perform duties that necessarily include those normally performed by a commissioned officer.

The concept of a warrant officer as announced by the Chief of Staff in 1957 is reflected today in AR 611-112 as follows:

4. Definitions. a. A warrant officer is an officer appointed, by warrant, by the Secretary of the Army and vested with limited powers. His rank and precedence are below those of a second lieutenant but above those of a cadet. He is a highly skilled technician who is provided to fill those positions above the enlisted level which are too specialized in scope to permit the effective development and continued utilization of a broadly trained, branch-qualified commissioned officer.

b. The work 'technician' as applied to a warrant officer in these regulations connotes the possession and exercise of a technical skill, as opposed to a tactical skill, and the ability to supervise enlisted personnel who are qualified in the technical occupations similar to those of the warrant officer.

5. Criteria for the selection of warrant officer positions.

a. Positions which meet the following criteria are authorized for warrant officer use:

(1) Positions that require a higher degree of technical skill than that required at the enlisted level.

(2) Positions that require unique aptitudes, abilities, talents, or capacities, such as those requiring musical direction and aircraft piloting.

(3) Positions predominantly concerned with the technical details of the professional occupations. This requirement serves to distinguish between the specialized skills of the warrant officer and specialized skills of the standard professions.

(4) Positions in which duty would tend to restrict the career development of broadly trained, branch qualified commissioned officers.

(5) Positions that require the continuous or repetitive assignment of technically qualified personnel.

(6) Positions which do not require command or tactical units.

(7) Positions for which a valid organizational requirement exists.

(8) When a valid organizational requirement exists for an assistant position above the enlisted level, the following will govern determination as to its designation for warrant officer use:

(a) Assistant positions may be designated for warrant officer use if the position being assisted is also designated for warrant officer use.

(b) Assistant positions to commissioned officer positions may be designated for warrant officers if:

1. They meet the provisions of (1) through (7) above.

2. They are required for supervision of a separate activity or function within the organizational element headed by a commissioned officer.

b. The following positions are not authorized for warrant officer use:

(1) Company Commander

(2) Company executive officer

(3) Staff officer and assistant staff officer of a unit staff

(4) Motor Officer

(5) Assistant positions to commissioned officer positions if both require the same types of skills and knowledges.

A listing of current warrant officer military occupational specialties is shown at Appendix A. All MOS titles except aviation have the work 'technician' included in the position description. Warrant officer strength is shown at Figure 1. The concept of the warrant officer was reinforced in the Department of Army Study in 1966 and is the concept and policy today. It is reproduced below:

#### THE FUTURE OF THE WARRANT OFFICER

1. The Warrant Officer continues to have a definite place in the Army's personnel structure in spite of the anxieties in some quarters that the Army may have little need for the Warrant Officer in the future
2. An increasing requirement for personnel to operate and maintain mechanical, electrical and electronic equipment provides a firm future for the Warrant Officer. Their jobs, in which continuity of assignment and requirement obtains, must be filled by personnel who possess a high degree of technical skill acquired through extensive training. Because of the extension of Warrant Officers into technical areas, a gradual reduction of Warrant Officer spaces in administrative and supply areas will evolve.
3. The Warrant Officer, under the Army's present concept is a highly skilled tech-

nician who is provided to fill those positions above the enlisted level that are too specialized in scope to permit the effective development and continued utilization of broadly trained, branch qualified commissioned officers.

4. Warrant Officers will be utilized only to fill bona fide organizational requirements and will not be considered as a category of personnel established as a reward or incentive for either former enlisted personnel or commissioned officers.

During this same period the Department of the Army was conducting a review of Army officer schools. In regard to warrant officer schooling the board recommended:

#### WARRANT OFFICER SCHOOLING

Career development for warrant officers is individualized, based in background, experience and education. Formal career patterns such as those for commissioned officers do not exist for warrant officers. Occupational proficiency in designated specialized fields is a prerequisite to appointment, and assignment and utilization are limited to authorized and closely controlled positions. Regulations restrict warrant officers' military schooling to occupational training, although they participate extensively in extension courses.



WARRANT OFFICER STRENGTH

<u>Branch</u>	<u>Strength</u>
Adjutant General	646
Aviation	5203
Engineer	270
Field Artillery	117
Military Intelligence	975
Military Police	670
Ordnance	1417
Quartermaster	833
Signal	718
Transportation	165
 TOTAL	 11646

\*As of 25 Jan 76  
Source: Warrant Officer Branch

Figure 1

The board also recommended that warrant officer aviators attend a branch immaterial orientation course during their sixth to tenth years of service. This course was to be conducted at a combat arms school and cover battalion staff functions and tactical operations. Recommended length of the course was to be approximately six weeks.<sup>5</sup> In 1967 a test course for aviation warrant officers was instituted at the United States Army Aviation Center at Fort Rucker, Alabama. It was formally called the Aviation Warrant Officer Intermediate Course, and its length was approximately 4 times as great as recommended by the Haines Board; nearly 6 months. This course was so successful in terms that warrants now had a course similar to commissioned officers, that another course was developed, approximately the same length. This course was designated the Aviation Warrant Officer Advanced Course. Warrant officer education seems to be judged by the same standards as commissioned officer education. The Intermediate Course was designed primarily for experienced CWO-2 and CWO-3 with about six years active service. It was designed to be the counterpart of the commissioned officer's career course.<sup>6</sup> Approximately one-third of the course was devoted to aviation subjects. The remaining portion covered maintenance management, management in general and battalion and brigade tactics and staff functions.

The Advanced Course, which was designed to be the warrant officers' equivalent of the Command and General

Staff College, was set into motion in 1972 and it too was heralded by commissioned and warrant officers as being the answer to the need for career schooling for warrant officers. In September of 1973 the courses were officially renamed the Aviation Warrant Officer Advanced Course and the Warrant Officer Senior Course. Warrant officers who were not aviators began to attend the senior course in 1973 and now the Branch Immaterial Warrant Officer Senior Course is beginning to receive feedback from the field. Field commanders all want their "appropriate" share of senior course graduates. As a result every branch service school is developing an advanced course for warrant officers.

#### SUMMARY

The warrant officer, prior to the Korean Conflict, was considered a "super enlisted man." Even though he was given officer status, he was not thought of as an integral part of the Army structure.

Following the Korean Conflict, the expansion of technology required highly specialized technicians and warrant officers were designated to fill this bill. Instead of being thought of as specifically technicians, they were thought of as being superior to enlisted men and inferior to commissioned officers.

The Haines Board recommendations on officer schooling treated the warrant officer education question, recommending an "advanced" type course for aviation warrants.

Every warrant officer branch has developed or is developing an Advanced Course, very possibly because of the establishment of the Senior Course. (Common sense dictates that in order to attend a senior level course, a junior level course must be completed.)

## CHAPTER 2

### FOOTNOTES

<sup>1</sup>Bourjaily Jr., Monte, A Brief History of the Warrant Officer in the Military Services of the United States, p. 1-9. Most historical references are from this work. This differs lightly from the history presented in DA Pamphlet 600-11. See also Coroneos, Paul P.

<sup>2</sup>Coroneos, Paul P., The Warrant Officer in the Volunteer Force, p. 5-9. Some references in this chapter are adapted from his work.

<sup>3</sup>US Department of the Army. Office of Personnel Operations. Report-Army Warrant Officer Career Program, p. 11. Official concept and policy reproduced for clarity and importance. (Hereinafter referred to as "Warrant Officer Study.")

<sup>4</sup>US Department of the Army, Report of the Department of the Army Board to Review Army Officer Schools, p. 13. Official view reproduced for clarity. (Hereafter referred to as the Haines Board.)

<sup>5</sup>Ibid., p. 83

<sup>6</sup>Moran, Michael L., "Where to from Here?", United States Army Aviation Digest, July 1972. Most references to the early development of the career courses are from CPT Moran's article.

## CHAPTER 3

### CAREER PATTERNS

#### BACKGROUND

The diversification of skills among warrant officers makes it impossible for a single career pattern to exist for all warrant officers.<sup>1</sup> Most career patterns are divided into phases wherein the warrant officer progresses from a basic skill level to increasing levels of skill.

To facilitate assignment and school selection processes, career patterns are structured on the basis of three phases. Aviation career patterns will be discussed separately because of the more formal manner that they are presented in current Department of the Army publications.

#### CAREER DEVELOPMENT PHASES

Warrant officer career patterns are expressed in three phases which encompass the career field, not necessarily career branch. The three phase system implies technical progression in skill levels. The first phase, which lasts approximately 5 years, represents

an initial utilization period in which the warrant officer refines the skills of his specialty and gains familiarity with the organizational structure associated with the specialty. The Second phase extends to the 13th year of warrant officer service and involves an additional refinement of skills. The third phase covers the remaining years of service and involves assignment into positions which require the utmost in technical skill, experience and maturity. Career patterns for the 27 career fields are shown at Appendix B.<sup>2</sup>

Further complicating this situation is the fact that warrants are evaluated by the same system as commissioned officers. The Officer Evaluation Report (OER) is management oriented rather than skill oriented, thus the warrant himself may be confused concerning the standards by which he is judged. Since advancement to a higher skill level is the goal of warrant officer career progression it is logical that this is the area in which he should be evaluated.

Career progression for warrant officers actually becomes more technical in each phase. As the warrant officer progresses through each phase he usually works on more complex equipment which sometimes equates to a higher level in the organization. It should be noted, however, that the military occupational specialty (MOS) remains the same regardless of the level in the organization.

#### SPECIAL CASE - AVIATION MODEL

The lack of a definitive career pattern for aviation warrant officers led most of them to believe that a successful

career would be attained if an individual became qualified in every aircraft in the Army inventory and at the same time be a safety officer, maintenance officer and a flight examiner.<sup>3</sup> This created a situation where the warrant officer aviator really became a 'generalist' in aviation. It was felt that he could not have been highly skilled in any of his qualifications. Because of the conflict in Southeast Asia, this problem became more acute in that there was very little difference between an aviation warrant officer and a commissioned officer who was an aviator - neither were technical experts, and both were striving for as many aircraft qualifications as possible.

The aviation warrant officer, guided by the new career pattern (formulated in 1972) attends initial flight training and upon graduation is appointed a warrant officer, WO-1. He will serve his initial utilization tour in the basic aircraft of the Army, either the utility or observation type. Following this assignment his service obligation is ended, unless the individual is a member of the Regular Army. He must then decide to stay on active duty or to leave the Army. Deciding to remain on active duty, the young warrant officer now decides on career field entry training (CFET). He will choose from one of three fields: Operations/Training, Flight Safety, or Maintenance. During this period he will be eligible to attend the Aviation Warrant Officer Advanced Course. He may also be eligible for advanced civil schooling in his field. During the next



few years he will be considered for higher level technical training in his field. The overall objective of the career pattern is to provide the Army with a highly skilled aviation technician who can provide the maximum contribution in the later part of his career. In the Operations/Training field, for example, this could be as an instrument examiner in one of the more sophisticated rotary or fixed wing aircraft.

#### ASSIGNMENTS

It is beyond the scope of this study to determine all the options available to warrant officers in all military occupational specialties. Warrant officer positions are not presently identified in either Table of Organization and Equipment (TOE) or Tables of Distribution and Allowances (TDA) by rank or grade, but only require a warrant officer with the identified MOS. It is possible for an aviation warrant officer, motor maintenance officer or a field artillery radar operator to serve his entire 20 or 30 year career at battalion level. In fact, this is the stated purpose of the warrant officer corps - repetitive assignments in specialized technical positions that cannot be filled by broadly trained commissioned officers.<sup>4</sup> Future warrant officers in the fields of medicine, lasers, or computers will probably have to be appointed in a similar fashion

to aviation warrant officers owing to the extensive training that will be required in these fields.<sup>5</sup>

#### SUMMARY

Career development of Army warrant officers does not include progression into executive or high level management positions. There are technical staff positions that exist at Depots and Major Army Commands; however, these positions are technical in nature and not "management" oriented.

The warrant officer progresses into positions of increasingly greater technical knowledge in nearly every career field. This progression is normally equipment oriented with the more sophisticated equipment usually existing at higher levels of organization.

## CHAPTER 3

### FOOTNOTES

<sup>1</sup>Anderson, Thomas E., "A New Career Pattern", United States Army Aviation Digest, July 1972. Most references to the warrant officer career pattern are taken from this article. Warrant officer management is now centralized into the Warrant Officer Branch, so the Aviation Warrant Officer Branch no longer exists. Colonel Anderson's views closely parallel DA Pamphlet 600-11 concerning warrant officer career development.

<sup>2</sup>US Department of the Army. Office of Personnel Operations. Department of the Army Pamphlet No. 600-11 Career Planning for Army Warrant Officers. Washington: 17 October 1969. Career patterns are extracted from this pamphlet.

<sup>3</sup>Ibid., Anderson., p. 30.

<sup>4</sup>US Department of the Army, Report-Army Warrant Officer Career Program, p. 11.

<sup>5</sup>Coroneos, Paul P., The Warrant Officer in the Volunteer Force, p. 31. LTC Coroneos's evidence seems to substantiate the expectation of younger accessions of warrant officers.

## CHAPTER 4

### MILITARY TRAINING PROGRAMS

#### BACKGROUND

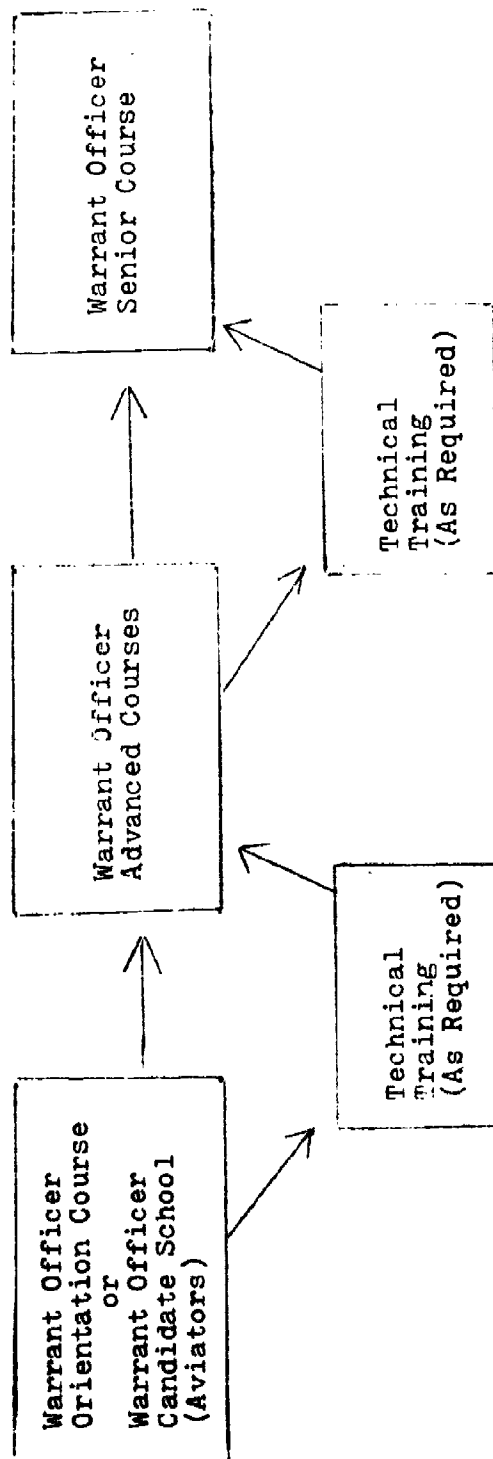
Warrant officer military training is depicted in the model shown at figure 2. All warrant officers, except aviation and medical, attend the Warrant Officer Orientation Course, at Fort Sill, Oklahoma, upon receiving their warrant. The purpose of this course is "to provide newly appointed warrant officers with information concerning social and military customs, traditions and responsibilities of the warrant officer, and instruction in the basic military arts which will facilitate his adjustment to officer status."<sup>1</sup>

Technical training is provided throughout the career of the warrant officer to renew knowledge, increase technical proficiency, and update skills as required. In a dynamic field such as data processing repair, the warrant officer may attend training frequently as computer systems change and the state of the art advances. A bandsman, on the other hand, may never attend any technical training courses.

Technical training available to warrant officers is shown at Appendix C. Length of these courses varies

Figure 2

WARRANT OFFICER TRAINING MODEL



with the complexity of the skill to be acquired. Nearly all courses result in the reward of a new MOS as skill qualification.

Because of the extensive task analysis of technical (skill-type) courses required by the Training and Doctrine Command (TRADOC) all were assumed valid. In addition technical courses are constantly being updated based on field data. These are basically "hands-on" training and results are easily measured.

#### WARRANT OFFICER ADVANCED COURSES

Warrant Officer Advanced Courses range in length from 7 to 24 weeks. Approximately one-half of the warrant officer career fields presently have an advanced course. The others are in some stage of development. All the advanced courses are technical in nature and devote at least two-thirds of the program of instruction to technically related areas of the warrant officer's particular MOS. They provide an update in the technical area that the warrant officer is working in and expand his knowledge in his specialty. A review of the programs of instruction for these courses indicates that they are technically oriented and expand knowledge of a particular career field. The Aviation Warrant Officer Advanced Course, for example, offers the following

general subject areas and hours,<sup>2</sup>

Aviation Subjects	142
Maintenance	85
General Subjects	61
Command/Staff	32
Communications	5
Combined Arms	160
Air Traffic Control	178
Aviation Safety	156
Airfield Operations	27
Elective Studies	100

In addition aviation warrant officers graduating from the course receive a diploma from the United States Army Agency for Aviation Safety.

All advanced courses also afford the warrant officer, through the college elective program, the opportunity to attain the Department of the Army objective of an Associate Degree (2 years college).

Advanced courses offer "hands on" training and may award an additional MOS based on the training received. Because of the technical nature of the training in the Advanced courses, it is felt that they are performing a vital function in the training of warrant officers. In addition, approximately 61% of warrant<sup>3</sup> officers do not meet the DA prerequisite of an Associate Degree and the advanced courses provide an excellent opportunity to attain this objective. Educational levels of warrant officers as of 26 January 1976 are shown below:

High School	35%
1 Year College	26%
2 Years College (AA)	28%
Baccalaureate	9%
1 Year Post-Graduate	.4%
Professional Degree	1%
Masters Degree	.6%

No adequate yardstick has been developed to access career type courses.<sup>4</sup> Generally the quality assurance objective is met by an arbitrary administrative decision that a course will be a certain length. In the case of warrant officer advanced courses approximately one-sixth of the course is devoted to allowing warrants who do not meet the objective of an Associate Degree time to earn enough credits to attain the DA objective.

In addition, because the length of such courses is not determined by operational needs, but by an administrative decision, it can be asserted that a certain amount of time is "filler" or not derived from operational requirements.

The course is long enough to require a Permanent Change of Station (PCS) move - over 20 weeks.

It is beyond the scope of this study to perform a detailed analysis of the subject matter to be included in advanced courses in each of the 27 warrant officer career fields.

The elimination of the college elective portion



in the career course programs of instruction would result in significant savings in manpower and dollars. Not only would this make the course temporary duty (TDY) but it would also save the cost of a PCS move, with family, and the Army would gain an additional 2½ weeks of duty per student.

The DA objective of the Associate Degree could be met through off-duty study.

#### WARRANT OFFICER SENIOR COURSE

The Warrant Officer Senior Course is a branch immaterial course which all warrant officers in the grade CWO-3 or CWO-4 are eligible to attend. Personnel selected for the July 1976, January 1977 and July 1977 courses were from all branches. The statistical summary of selections is provided below.

<u>Control Branch</u>	<u>Principals Selected</u>
Adjutant General	42
Air Defense	27
Aviation	67
Engineer	6
Field Artillery	5
Military Intelligence	18
Military Police	17
* Ordnance	41

<u>Control Branch</u>	<u>Principals Selected</u>
Quartermaster	28
Signal	22
Transportation	3
TOTAL	276

The specific career fields and MOSs were not considered by the board. Selections are made based on the warrant officer control branch.

The stated purpose of the senior course is to provide selected warrant officers with an understanding of the organization and the functions of the major Army, joint and combined commands, and to broaden their intellectual depth and managerial ability.<sup>5</sup> Note that the purpose of the program of instruction reveals the fact that this is a general education course. The breakdown of academic subjects is shown at figure 3. Like the advanced courses, approximately one-sixth of the program of instruction includes elective time, devoted to college electives. It can be clearly seen from the subject breakdown that this course is general in nature with the purpose of increasing general knowledge of military subjects.

Assignments of warrant officers, as pointed out earlier, do not lead to executive positions or high level management. Student comments attest to the fact that the

# WARRANT OFFICER SENIOR COURSE

## A. Academic subjects

The Profession of Arms	
Management/Leadership	84
Financial Management	52
Personnel Management	33
Maintenance Management	34
Records and Supply Management	22
Contemporary Subjects	28
Communicative Arts	80
Physical Readiness Training	4
Military Justice and Administrative Law	8
TOTAL	345

MILITARY ARTS	
Strategy	64
Command and Staff	36
NEC Environment	21
Combat Support	22
Tactics	27

TOTAL 170

MEDICAL SUPPORT OF COMBAT OPERATIONS	10
UNITED STATES AIR FORCE	8
Elective Studies	100
GUEST SPEAKER PROGRAM	10
COURSE CRITIQUE	4
TOTAL ACADEMIC HOURS	663

Figure 3

course is not providing them (the student) with increased job opportunity or technical skill.<sup>6</sup> Most return to positions very similar to those held previously. Even the Staff and Faculty Guide at the Aviation Center implies that the course cannot be systems engineered, because no task identification can be made. It suggests that the best way to structure such a course is to look at the commissioned officer courses already in existence.<sup>7</sup> It can further be asserted that because warrant officer positions are not identified by grade that the Senior Course graduate who is a motor maintenance technician, for example, may never be assigned higher than the motor pool at battalion level - a position he held prior to attending the course.

The Senior Course contains approximately the same number of elective hours as the Advanced Courses, even though most warrant officers who have attended an Advanced Course may already meet the Associate Degree Objective.

Thus, if the elective program was eliminated from the Senior Course, this course could also be a TDY course resulting in significant savings in manpower and dollars.

A close look at the academic subjects in the Senior Course reveals that the warrant officer who received basic knowledge of these same subject areas in the Orientation and Advanced Courses is now receiving another review of maintenance management, for example, and

detailed application of the principles presented. A warrant officer bandsman in a recent class thus became knowledgeable in maintenance management and tactics - subjects he will never use based on his career development pattern.

Recent graduates in Signal, Military Police, Adjutant General and Ordnance Branches already serving in the highest level of organization in their career patterns, have "no place to go" after attending the course, even though most were senior CW-3 rank. Thus their only expectation after graduation is to be promoted to CW-4. (Their "ticket is punched.")

#### SUMMARY

Warrant officer technical training is an integral part of career development for technical specialists.

The Warrant Officer Advanced Courses are providing the warrant officer the opportunity to meet the Department of Army prerequisite in education and at the same time provide him with an update and expansion of his technical skill. In a fundamental sense the course fits into his career progression even though the results of much of this "soft-skill" training cannot be measured.

The Warrant Officer Senior Course does not "fit",

in a basic sense, into career progression of the warrant officer technician. The course is actually an expansion of the general knowledge subjects covered in the Advanced Courses.

In fact the course itself may actually serve to increase the expectations of those attending, to high level staff positions that do not exist in their career patterns.

Further, both courses are approximately six months in length, requiring the warrant officer to make two PCS moves in one year. This causes hardship on the family of warrants and at the same time costs the U.S. government a substantial amount in movement costs alone.

## CHAPTER 4

### FOOTNOTES

<sup>1</sup>US Army Field Artillery Center. Program of Instruction for Warrant Officer Orientation Course, p. 1.

<sup>2</sup>US Army Aviation Center. Program of Instruction for the Aviation Warrant Officer Advanced Course, p. 1.

<sup>3</sup>US Department of the Army. Military Personnel Center, Warrant Officer Branch. References to warrant officer strength, educational levels and selections for the Warrant Officer Course were obtained by several phone calls to the branch.

<sup>4</sup>"Warrant Officer Study", p. 136.

<sup>5</sup>US Army Aviation Center. Program of Instruction for the Warrant Officer Senior Course, p. 1.

<sup>6</sup>Ibid., p. 2.

<sup>7</sup>US Army Aviation Center. Staff and Faculty Guide. This is an unofficial document used by the staff and faculty of the Aviation Warrant Officer Advanced and the Warrant Officer Senior Courses in preparing the systems engineering documentation required for the course. Reference mentioned was from the author's recollection.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

After completing the examination of the warrant officer in the United States Army, it is appropriate to pause and look back over the observations presented. Chapter 1 reviewed the concept of the technician and the general lack of understanding of his role in the organization.

Chapter 2 traced the concept of the warrant officer from that of incentive and reward to the highly specialized technician that exists today. Department of the Army studies in 1966 and 1967 partially examined the warrant officer and his place in the Army. He was defined in these studies in mainly negative terms - he is neither commissioned nor enlisted; and he may not hold certain positions. This vagueness still exists today.

In Chapter 3, career patterns were reviewed emphasizing that development of technical expertise was the goal of career progression and that this did not necessarily equate to progression to higher levels in the organization. A CWO-1 could serve at division level and a CWO-4 at battalion. Even the OER does not evaluate warrant officer skills. Chapter 4 presented the various technical programs available to the warrant officer and discussed his career-type courses.



### CONCLUSIONS

The evolution of the warrant officer is beginning to parallel closely that of a commissioned officer. This in itself is not bad, but the management of warrant officers is not being thought of in the same terms that commissioned officers are managed.

Warrant officers now attend "career type" courses which in a fundamental sense do not fit into their career patterns. This has complicated warrant officer and commissioned officer identity and has created a situation where the warrant is no longer being thought of as a separate and vital part of the total force. The Warrant Officer Senior Course, in particular, in its stated purpose, is a "nice to have" general military education course. The time is now right to treat the warrant officer as a separate and vital part of the Army team.

### RECOMMENDATIONS

The college elective portion of the Warrant Officer Advanced Course should be eliminated, thereby making attendance at either course on TDY status. This will result in savings to the government from the standpoint of PCS and manhour dollars. Further, as commanders scrutinize these TDY funds, an intangible benefit of demanding results from the training may develop.

The author recommends that the Warrant Officer Senior Course should be eliminated and special training programs be established on an as needed basis, by career field, for those warrant officers being assigned to very high levels in the Army organization.

Finally, the difference between the commissioned officer (manager) and the warrant officer (technician) needs expanded publicity in Army journals. The warrant officer needs to regain his status as a separate and distinct entity.

It is hoped that this paper will generate interest and further study in the development, training and use of warrant officers in the United States Army. Further, it is realized that this paper is a beginning effort in this field where only a handful of studies exist concerning the Army warrant officer.

## APPENDIX A

### WARRANT OFFICER MOS TITLES

#### (1) Combat Operations

##### 10 AVIATION OPERATIONS

- 100B Rotary Wing Pilot, Observation Utility,  
and Light Cargo
- 100C Rotary Wing Pilot, Medium Transport
- 100D Rotary Wing Pilot, Heavy Transport
- 100E Rotary Wing Pilot, Attack
- 101B Fixed Wing Pilot, Single Engine
- 101C Fixed Wing Pilot, Multi-Engine
- 101D Fixed Wing Pilot, Surveillance Aircraft
- 102A Rotary and Fixed Wing Pilot

#### (2) Electronics

##### 20 GENERAL ELECTRONICS MAINTENANCE

- 201A Meteorology Technician
- 202A Medical Equipment Repair Technician

##### 21 FIELD ARTILLERY ELECTRONICS MAINTENANCE

- 211A Field Artillery Radar Technician
- 214E Field Artillery Missile System Technician,  
Pershing
- 214F Field Artillery Missile System Technician,  
Sergeant

##### 22 AIR DEFENSE ELECTRONICS MAINTENANCE

- 221B Missile Assembly Technician, Nike

- 221C Missile Maintenance Technician, SAFEGUARD
- 222B Air Defense Missile Fire Control Technician,  
Nike
- 223C Air Defense Missile System Technician, Hawk
- 223D Air Defense Missile System Technician,  
Improved Hawk
- 224B Chaparral/Vulcan System Technician
- 225B SAFEGUARD Data Processing Maintenance Tech-  
nician
- 226B Missile Site Radar Maintenance Technician
- 226C Perimeter Acquisition Radar Maintenance  
Technician
- 24 FIELD ARTILLERY MISSILE SYSTEMS REPAIR
  - 241E Field Artillery Missile System Repair  
Technician, Sergeant
  - 241F Field Artillery Missile System Repair  
Technician, Pershing
- 25 AIR DEFENSE MISSILE SYSTEMS REPAIR
  - 251B Air Defense Missile System Repair Tech-  
nician, Nike
  - 251C Air Defense Missile System Repair Tech-  
nician, Hawk
  - 251D Air Defense Missile System Repair Tech-  
nician, Improved Hawk
  - 252A Calibration Technician
- 26 SPECIAL AMMUNITION
  - 261A Special Ammunition Maintenance Technician
  - 262A Nuclear Weapons Electronic Technician
- 27 MISSILE SYSTEMS REPAIR
  - 271A Land Combat Support Missile Systems Repair  
Technician

28 COMMUNICATIONS-ELECTRONICS REPAIR

281A Radio Repair Technician

282A Radar Repair Technician

283A Electronic Warfare Repair Technician

285A Intercept Repair Technician

286A Communications-Electronics Repair Technician

(3) Electrical Maintenance

30 GENERAL ELECTRICAL MAINTENANCE

301A Data Processing Equipment Repair Technician

34 CRYPTOGRAPHIC EQUIPMENT REPAIR

341A Cryptographic Equipment Repair Technician

35 ELECTRICAL EQUIPMENT MAINTENANCE

351A Power Station Technician

36 AIR DEFENSE FIRE DISTRIBUTION SYSTEMS MAINTENANCE

361A Fire Distribution Systems Repair Technician

(4) Precision Maintenance

41 AMMUNITION

411A Ammunition Technician

42 ARMAMENT REPAIR

421A Armament Repair Technician

44 METALWORKING

441A Ordnance Shop Technician

46 AIRDROP EQUIPMENT REPAIR

461A Airdrop Equipment Repair Technician

(5) Military Crafts

52 UTILITIES MAINTENANCE

521A Utilities Maintenance Technician  
521C Tactical Support Equipment Maintenance  
Technician, SAFEGUARD

56 MARINE OPERATIONS AND MAINTENANCE

561B Harbormaster/Pilot  
561C Vessel Master, Unlimited  
561D Vessel Master, Coastal; Mate Unlimited  
561E Mate  
562B Marine Engineering Technician/Marine  
Inspector  
562C Chief Engineer, Unlimited  
562D Chief Engineer, Coastal; Assistant Engineer,  
Unlimited  
562E Assistant Engineer

(6) Motor Maintenance

62 ENGINEER EQUIPMENT REPAIR

621A Engineer Equipment Repair Technician

63 AUTOMOTIVE REPAIR

631A Automotive Maintenance Technician

632A Automotive Repair Technician

67 AIRCRAFT REPAIR

671B Aircraft Repair Technician, Non-Rated

671C Aircraft Repair Technician, Rotary Wing  
Rated

671D Aircraft Repair Technician, Fixed Wing  
Rated

671E Aircraft Repair Technician, Rotary and  
Fixed Wing Rated

(7) Clerical

71 ADMINISTRATION

711A Unit Personnel Technician

712A General Staff Administrative Technician

713A Legal Administrative Technician

72 COMMUNICATIONS CENTER OPERATIONS

721A Cryptographic Technician

74 DATA PROCESSING

741B Data Processing Technician, PCM

741C Data Processing Technician, ADPS

741D Data Processing Technician Programmer

741E Telecommunications Automation Software Technician

76 SUPPLY

761A Unit Supply Technician

762A Support Supply Technician

(8) Graphics

81 DRAFTING AND CARTOGRAPHY

811A Photomapping Technician

82 SURVEYING

821A Survey Technician

83 Printing

831A Map Reproduction Technician

832A PSYOP Reproduction Technicians

(9) General Technical

91 TECHNICAL HEALTH CARE

911A Military Physician's Assistant

919A General Technical Nurse

94 FOOD SERVICE

941A Food Service Technician

95 MILITARY POLICE

951A Criminal Investigator

951C Questioned Document Examiner

951D Firearms Identification examiner

951E Fingerprint Examiner

951F Photographic Evidence Technician

951G Criminal Laboratory Chemical Analysis  
Technician

96 MILITARY INTELLIGENCE

961A Army Attache Technical Assistant

962A Image Interpretation Technician

963A Prisoner of War Interrogation Technician

964A Order of Battle Technician

97 GENERAL INTELLIGENCE

971A Counterintelligence technician

972A Area Intelligence Technician (Classified  
MOS)

98 COMMUNICATIONS INTELLIGENCE

981A Cryptanalytic Technician (Classified MOS)

982A Traffic Analysis Technician (Classified  
MOS)

983A Emanations Analysis Technician (Classified  
MOS)

988A Voice Intercept Technician (Classified MOS)

(10) Special Assignment

02 CLUB MANAGEMENT

021A Club Manager



03 BAND

031A Bandmaster

05 COMMUNICATIONS INTERCEPT

051A Morse Intercept Technician (Classified  
MOS)

052A Non-Morse Intercept Technician

053A Special Identification Technician (Classified  
MOS)

(00) Duty and Reporting Codes

001A Unqualified in authorized Warrant Officer  
MOS

002A Patient

003A Student

004A Duties Unassigned

APPENDIX B  
WARRANT OFFICER CAREER PATTERNS

CAREER PROGRAM: ADMINISTRATION		CONTROL BRANCH: SEE NOTE	
WARRANT OFFICER SERVICE (YEAR)		2 4 6 8 10 12 14 16 18 20 22	
CAREER PHASES	<div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	MILITARY PERSONNEL OFFICER COURSE (MOS 711A) LEGAL ADMINISTRATIVE TECHNICIAN COURSE (MOS 713A)		
SKILL	UNIT PERSONNEL TECHNICIAN - MOS 711A		
ACQUISITION PATTERN	LEGAL ADMINISTRATIVE TECHNICIAN - MOS 713A  GENERAL STAFF ADMINISTRATIVE TECHNICIAN - MOS 712A		
UTILIZATION PATTERN	MOS 711A - JOE UNIT MOS 713A - SJA SECTION AT DIVISION ON COMPARABLE LEVEL  <div> <div> MOS 711A - TMA ACTIVITIES (POST, THEATER Hqs, COMUS ARMYCS)  MOS 713A - SJA SECTION AT POST, THEATER Hqs, COMUS ARMYCS, COMUS </div> <div> MOS 711A - DOD, JOINT Hqs, DA Hqs, DA FIELD ACTIVITIES AND ABOVE  MOS 712A - ADMINISTRATIVE ASSISTANT TO LIEUTENANT GENERAL  MOS 713A - DOD, JOINT Hqs, DA Hqs, DA FIELD ACTIVITIES </div> </div>		
NOTE: ADJUTANT GENERAL BRANCH, GPO (MOS 711A AND 712A) OFFICE OF THE JUDGE ADVOCATE GENERAL (MOS 713A)			

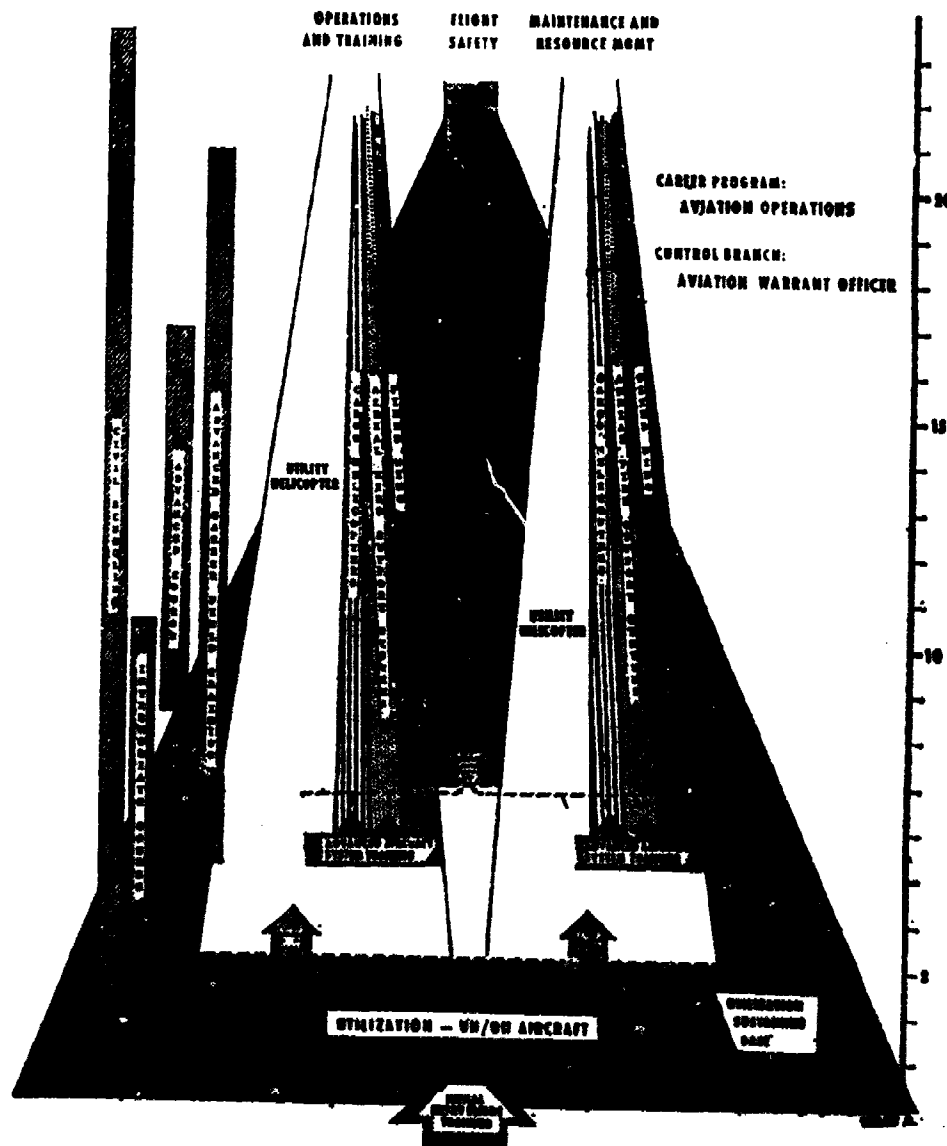
<b>CAREER PROGRAM: AIRDROP OPERATIONS</b> <b>WARRANT OFFICER</b> <b>SERVICE (YEAR)</b>		<b>CONTROL BRANCH: QUARTERMASTER</b>	
<b>CAREER PHASES</b>	<p>             2    4    6    8    10    12    14    16    18    20    22              ← PHASE #1 →    ← PHASE #2 →    ← PHASE #3 →           </p>		
<b>TRAINING PATTERN</b>			
<b>SKILL</b>			
<b>ACQUISITION PATTERN</b>	AIRDROP EQUIPMENT REPAIR TECHNICIAN - MOS 461A		
<b>UTILIZATION PATTERN</b>	RANDOM ASSIGNMENT TO OPERATIONAL AIRBORNE UNITS, SPECIAL FORCES UNITS, AERIAL DELIVERY UNITS, AIRBORNE AND AERIAL DELIVERY SUPPORT UNITS, AND AIRBORNE EQUIPMENT MAINTENANCE AND REPAIR UNITS. SELECTIVE ASSIGNMENT TO INFANTRY COMPANIES/BATTALIONS, TEST AND EVALUATION TASK GROUPS, AND TO THE QUARTERMASTER, AVIATION, AND SPECIAL FORCES TRAINING CENTERS.		

CAREER PROGRAM: AMMUNITION SERVICE		CONTROL BRANCH: ORDNANCE										
WARRANT OFFICER SERVICE (YEAR)		2	4	6	8	10	12	14	16	18	20	22
CAREER PHASES		← PHASE #1 →		← PHASE #2 →				← PHASE #3 →				
TRAINING PATTERN	NOTE 1 NOTE 2 ORDNANCE AMMUNITION TECHNICIAN - NOS 411A ORDNANCE AMMUNITION DIRECT SUPPORT COMPANY NOS 261A - ORDNANCE SPECIAL AMMUNITION COMPANY NOS 262A - ORDNANCE NUCLEAR WEAPONS MAINTENANCE DETACHMENT NOS 411A - POST LEVEL STORAGE AND REMEDIATION DETACHMENT; SERVICE SCHOOL NOS 261A+262A - COMB NUCLEAR WEAPONS STORAGE/MAINTENANCE FACILITIES; NUCLEAR WEAPONS GENERAL SUPPORT UNITS; SERVICE SCHOOL NOS 411A - ARMY INTERIEL COMMAND; AMMUNITION SUCCESSION AND SUPPLY AGENCY; DEPOS NOS 261A+262A - USA RESERVATION COMMAND; AMMUNITION, ASM DETOURS AND FIELD ARTILLERY SENSORS	NUCLEAR WEAPONS MAINTENANCE INTERMEDIATE COURSE (NOS 261A AND 262A ONLY) NUCLEAR WEAPONS MAINTENANCE ADVANCED COURSE (NOS 261A AND 262A ONLY)										
SKILL	ORDNANCE AMMUNITION TECHNICIAN - NOS 411A NUCLEAR WEAPONS ASSEMBLY AND MAINTENANCE TECHNICIAN - NOS 261A NUCLEAR WEAPONS ELECTRONIC TECHNICIAN - NOS 262A NUCLEAR WEAPONS ASSEMBLY AND MAINTENANCE TECHNICIAN - NUCLEAR WEAPONS ELECTRONIC TECHNICIAN (CROSS-QUALIFICATION IN NOS 261A AND 262A)											
ACQUISITION PATTERN												
UTILIZATION PATTERN												

NOTE 1. AMMUNITION OFFICER COURSE (ON AS-REQUIRED BASIS FOR NOS 411A ONLY)

NOTE 2. NUCLEAR WEAPONS MAINTENANCE REFRESHER COURSE (ON AS-REQUIRED BASIS FOR NOS 261A AND 262A ONLY)

# CAREER FIELDS



CAREER PROGRAM: CALIBRATION		CONTROL BRANCH: ORDNANCE											
WARRANT OFFICER SERVICE (YEAR)		2	4	6	8	10	12	14	16	18	20	22	
CAREER PHASES		<div>← PHASE #1 →</div> <div>← PHASE #2 →</div> <div>← PHASE #3 →</div>											
TRAINING PATTERN													
SKILL													
ACQUISITION PATTERN		CALIBRATION TECHNICIAN - NOS 252A											
UTILIZATION PATTERN		<div>CALIBRATION TECHNICIAN - ARMY CALIBRATION COMPANY</div> <div>           CALIBRATION TECHNICIAN - US ARMY RETECOLLOY AND CALIBRATION CENTER; ELECTRONIC PROTING GROUP;            WHITE SANDS MISSILE RANGE; US ARMY DEPOT (KORSA); US ARMY CALIBRATION            ACTIVITY (GERMANY)         </div> <div>           CALIBRATION TECHNICIAN - SERVICE SCHOOL; RESEARCH,            DEVELOPMENT AND TEST ACTIVITY         </div>											

CAREER PROGRAM: COMMUNICATIONS-ELECTRONICS MAINTENANCE	
WARRANTY OFFICER SERVICE (YEAR)	CONTROL BRANCH: SIGNAL
CAREER PHASES	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div> <div> <div>← PHASE #1 →</div> <div>← PHASE #2 →</div> <div>← PHASE #3 →</div> </div>
TRAINING PATTERN	COMMUNICATIONS-ELECTRONICS MAINTENANCE CAREER COURSE
SKILL ACQUISITION PATTERN	RADIO REPAIR TECHNICIAN - NOS 281A
	RADIO REPAIR TECHNICIAN - NOS 282A
	NOTE 1 COMMUNICATIONS-ELECTRONICS REPAIR TECHNICIAN - NOS 286A
UTILIZATION PATTERN	NOS 281A & 282A - LIGHT EQUIPMENT MAINTENANCE COMPANY (GS)
	NOS 286A - DIVISION MAINTENANCE BATTALION
	<div> <div> NOS 286A - TRANSPORTATION AIRCRAFT MAINTENANCE COMPANY (DSAB) 1 FIELD AIRT SUPPORT UNITS (DSAB) 1  SERVICE SCHOOLS AND OTHER NON-TSC ACTIVITIES </div> <div> NOS 286A - AIRCRAFT MAINTENANCE DEPOT BATTALION (SEA-BORNE) 1 THEATER AND COMUS DEPOTS 1 DEPTUS  COMMUNICATIONS AGENCY 1 SERVICE SCHOOLS </div> </div>

NOTE 1. CERTAIN QUALIFIED INDIVIDUALS WILL ENTER PHASE #1 IN NOS 286A.



CAREER PROGRAM: CRIMINAL INVESTIGATION		CONTROL BRANCH: MILITARY POLICE	
WARRANT OFFICER SERVICE (YEAR)		2 4 6 8 10 12 14 16 18 20 22	
CAREER PHASES		PHASE #1 → PHASE #2 → PHASE #3 →	
TRAINING PATTERN	CRIMINAL INVESTIGATION CAREER COURSE		
SKILL ACQUISITION PATTERN	CRIMINAL INVESTIGATOR - NOS 951A		
	POLYGRAPH EXAMINER - SURVEY "K"		
	QUESTIONED DOCUMENT EXAMINER - NOS 951C		
	FINGERPRINT IDENTIFICATION EXAMINER - NOS 951D		
	FINGERPRINT EXAMINER - NOS 951E		
	PHOTOGRAPHIC EVIDENCE TECHNICIAN - NOS 951F		
UTILIZATION PATTERN	CRIMINAL INVESTIGATOR - MILITARY POLICE CRIMINAL INVESTIGATION DETACHMENT		
	CRIMINAL INVESTIGATOR - CRIMINAL INVESTIGATION DETACHMENT OR FIELD OFFICE; GROUP		
	POLYGRAPH EXAMINER - CRIMINAL INVESTIGATION DETACHMENT OR FIELD OFFICE		
	LABORATORY TECHNICIAN - ARMY CORP LABS LABORATORY		
	CRIMINAL INVESTIGATOR - CRIMINAL INVESTIGATION DETACHMENT; CRIMINAL INVESTIGATION ACTIVITIES IN SUPPORT OF MAJOR HEADQUARTERS POLYGRAPH EXAMINER - ARMY CORP LABS LABORATORY; MAJOR DA FIELD ACTIVITIES LABORATORY TECHNICIAN - SENIOR EXAMINER/COMMANDER, ARMY CORP LABS LABORATORY		

CAREER PROGRAM: CRYPTOGRAPHY		CONTROL BRANCH: SIGNAL										
WARRANT OFFICER SERVICE (YEAR)												
CAREER PHASES		<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div>										
TRAINING PATTERN		<div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>										
SKILL ACQUISITION PATTERN		NOTE 1										
		CRYPTOGRAPHIC EQUIPMENT REPAIR TECHNICIAN - NOS 341A										
		CRYPTOGRAPHIC TECHNICIAN - NOS 721A										
UTILIZATION PATTERN		NOS 341A - LIGHT EQUIPMENT MAINTENANCE COMPANY; ARMY SECURITY AGENCY COMMUNICATIONS UNIT; STATION FACILITIES; INTELLIGENCE CONTROL CENTER										
		NOS 721A - DIVISION SIGNAL BATTALION; STATION FACILITIES										
		<div> <div>NOS 341A - CRYPTO SECURITY DETACHMENT; ARMY SECURITY AGENCY FIELD STATION; FIELD 3; AR SIGNAL SUPPORT BATTALIONS; ARMY SIGNAL CENTER; DEPT MAINTENANCE COMPANY</div> <div>NOS 721A - CRYPTO SECURITY DETACHMENT; FIELD ARMY MILITARY INTELLIGENCE AND SIGNAL SUPPORT BATTALIONS; ARMY SIGNAL CENTER; STATION FACILITIES</div> </div>										
		<div> <div>NOS 341A &amp; 721A - STATION HEADQUARTERS; DEFENSE INTELLIGENCE AGENCY; DEFENSE COMMUNICATION SUPPORT AGENCY; PWAD; TEST; AD EVALUATION TASK GROUPS</div> </div>										
		NOTE 1. COMMUNICATIONS CENTER OPERATIONS COURSE (ON AS-REQUIRED BASIS FOR NOS 721A ONLY).										

CAREER PROGRAM: DATA PROCESSING EQUIPMENT REPAIR	
WARRANT OFFICER SERVICE (YEAR)	CONTROL BRANCH: SIGNAL
CAREER PHASES	
TRAINING PATTERN	
SKILL	
ACQUISITION	DATA PROCESSING EQUIPMENT REPAIR TECHNICIAN - NOS 301A PINE DISTRIBUTION SYSTEMS REPAIR TECHNICIAN - NOS 361A
PATTERN	
UTILIZATION	NOS 301A - RANDOM ASSIGNMENT TO FOLLOWING TYPES OF UNITS/ACTIVITIES: LIGHT EQUIPMENT MAINTENANCE COMPANY; SIGNAL DEPT MAINTENANCE COMPANY; SIGNAL FACILITIES; INVENTORY CONTROL CENTERS NOS 361A - RANDOM ASSIGNMENT TO FOLLOWING TYPES OF UNITS/ACTIVITIES: NINE HERCULES AND NINE AIR DEFENSE BATTALIONS; US ARMY AIR DEFENSE ARTILLERY CENTER AND SCHOOLS; COMBAT DEVELOPMENTS COMMAND AIR DEFENSE AGENCY; MISSILE MASTER SUPPORT DETACHMENT

CAREER PROGRAM: FIELD ARTILLERY RADAR OPERATION/MAINTENANCE	
WARRANT OFFICER SERVICE (YEAR)	
	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div>
CAREER PHASES	<div> <div>← PHASE #1 →</div> <div>← PHASE #2 →</div> <div>← PHASE #3 →</div> </div>
TRAINING PATTERN	NOTE 1
SKILL	
ACQUISITION PATTERN	FIELD ARTILLERY RADAR TECHNICIAN - MOS 211A
UTILIZATION PATTERN	<p>RANDOM ASSIGNMENT TO DIVISIONAL ARTILLERY BATTALIONS, TARGET ACQUISITION BATTERIES, AND SEPARATE FIELD ARTILLERY RADAR DETACHMENTS.</p> <p>SELECTIVE ASSIGNMENT TO THE FIELD ARTILLERY CENTER AND SCHOOL, AND TO TEST AND EVALUATION ACTIVITIES.</p> <p>NOTE 1. REFRESHER TRAINING PROVIDED ON AS-REQUIRED BASIS.</p>

CAREER PROGRAM: FOOD SERVICE		CONTROL BRANCH: QUARTERMASTER	
WARRANT OFFICER SERVICE (YEAR)			
CAREER PHASES	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div> <div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	NOTE 1		
SKILL			
ACQUISITION PATTERN	FOOD SERVICE TECHNICIAN - MOS 941A		
UTILIZATION PATTERN	<div>FOOD SERVICE TECHNICIAN - BREGMA, DIVISION AFFILIATE, OR GROUP HEADQUARTERS</div> <div>FOOD SERVICE TECHNICIAN - DIVISION (SUPPLY AND TRANSPORTATION BATTALION); FIELD INSTALLATIONS (TMA)</div> <div>FOOD SERVICE TECHNICIAN - DEPARTMENT OF THE ARMY HEAD-QUARTERS, ARMY MEDICAL CORPS, AND SERVICE SCHOOLS</div>		

NOTE 1. FOOD SERVICE SUPERVISORS COURSE PROVIDED ON AS-REQUIRED BASIS.

<b>CAREER PROGRAM: FORWARD AREA AIR DEFENSE SYSTEMS MAINTENANCE</b> <b>WARRANT OFFICER</b> <b>SERVICE (YEAR)</b>		<b>CONTROL BRANCH: AIR DEFENSE ARTY</b>	
<b>CAREER PHASES</b>	<p>             2      4      6      8      10      12      14      16      18      20      22              ← PHASE #1 →      ← PHASE #2 →      ← PHASE #3 →           </p>		
<b>TRAINING PATTERN</b>			
<b>SKILL</b>			
<b>ACQUISITION PATTERN</b>	CHAPARRAL/VULCAN SYSTEM TECHNICIAN - MOS 224B		
<b>UTILIZATION PATTERN</b>	ASSIGNMENTS ARE PRIMARILY TO THE HEADQUARTERS ELEMENT OF CHAPARRAL/VULCAN BATTALIONS. A LIMITED NUMBER OF POSITIONS ARE AVAILABLE AT THE US ARMY AIR DEFENSE ARTILLERY CENTER AND SCHOOL.		

CAREER PROGRAM: GENERAL INTELLIGENCE		CONTROL BRANCH: MILITARY INTELLIGENCE										
WARRANT OFFICER SERVICE (YEAR)		2	4	6	8	10	12	14	16	18	20	22
CAREER PHASES		← PHASE #1 →		← PHASE #2 →				← PHASE #3 →				
TRAINING PATTERN	NOTE 1	NOTE 2		NOTE 3		NOTE 4						
SKILL ACQUISITION PATTERN	COMMINT/INTELLIGENCE TECHNICIAN - NOS 971A (PLUS SUPPLIES G,H,I,K, AS APPROPRIATE) AREA INTELLIGENCE TECHNICIAN - NOS 972A (PLUS SUPPLIES G,H,I,K, AS APPROPRIATE) COMMINT/INTELLIGENCE/AREA INTELLIGENCE TECHNICIAN - NOS 971A+972A											
UTILIZATION PATTERN	NOS 971A - MILITARY INTELLIGENCE DETACHMENT/TEAM NOS 972A - MILITARY INTELLIGENCE DETACHMENT/TEAM NOS 971A - MILITARY INTELLIGENCE BATTALION NOS 972A - MILITARY INTELLIGENCE BATTALION NOS 971A+972A - MILITARY INTELLIGENCE GROUP, THEATER AND THEATER AREA MILITARY INTELLIGENCE ELEMENTS NOTE 1. ELECTIVE TRAINING IN LANGUAGE, OR DEFENSE AGAINST SOUND EQUIPMENT, OR DEFENSE AGAINST METHODS OF ENTRY. NOTE 2. ELECTIVE TRAINING IN SUBJECT(S) IN NOTE 1 PLUS FOLLOWSHAW EXERCISES OR INVESTIGATIVE PHOTOGRAPH TRAINING. NOTE 3. OPTIONAL ATTENDANCE AT ANY OF THE ABOVE COURSES IN WHICH NOT ALREADY QUALIFIED. NOTE 4. SELECTIVE CROSS-TRAINING BETWEEN NOS 971A AND 972A PLUS OPTIONAL TRAINING IN REMAINING ADDITIONAL SKILLS.											

CAREER PROGRAM: GENERAL SUPPLY		CONTROL BRANCH: QUARTERMASTER	
WARRANT OFFICER SERVICE (YEAR)			
CAREER PHASES	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div> <div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	NOTE 1		
SKILL			
ACQUISITION PATTERN	UNIT SUPPLY TECHNICIAN - MCS 761A		
UTILIZATION PATTERN	<div>UNIT SUPPLY TECHNICIAN - BATTALION AND SEPARATE COMPANY, OR COMPARABLE UNIT</div> <div>UNIT SUPPLY TECHNICIAN - BRIGADE, DIVISION, INSTALLATION, SUPPLY ACTIVITY (TDA), SERVICE SCHOOL</div> <div>UNIT SUPPLY TECHNICIAN - DEPARTMENT OF THE ARMY FIELD ACCOUNTS, OFFICE OF THE SINGAPORE GENERAL, NMAG, SERVICE SCHOOL</div>		

NOTE 1. ARMY SUPPLY OFFICER COURSE AND DEFENSE REPORT OPERATIONS MANAGEMENT COURSE PROVIDED ON AS-REQUIRED BASIS.



CAREER PROGRAM: GRAPHICS		CONTROL BRANCH: ENGINEER	
WARRANT OFFICER SERVICE (YEAR)			
CAREER PHASES	2 4 6 8 10 12 14 16 18 20 22 PHASE #1 PHASE #2 PHASE #3		
TRAINING PATTERN	GRAPHICS CAREER COURSE		
SKILL	PHOTOGRAPHING TECHNICIAN - NOS 811A		
	SURVEY TECHNICIAN - NOS 821A		
	MAP REPRODUCTION TECHNICIAN - NOS 831A		
ACQUISITION PATTERN			
UTILIZATION PATTERN	NOS 811A - COMPS TOPOGRAPHIC COMPANY; ARMY TOPOGRAPHIC BATTALION NOS 821A - COMPS TOPOGRAPHIC COMPANY; ARMY TOPOGRAPHIC BATTALION; ARTILLERY SURVEY SECTION NOS 831A - COMPS TOPOGRAPHIC COMPANY; ARMY TOPOGRAPHIC BATTALION NOS 811A; 821A; 831A - TOPOGRAPHIC BASE BATTALION; SERVICE SCHOOL NOS 811A; 821A - ARMY MAP SERVICE; NMAG; RESEARCH AND DEVELOPMENT ACTIVITIES; SERVICE SCHOOL NOS 831A - FIELD TRAINING PLANTS; ARMY MAP SERVICE; RESEARCH AND DEVELOPMENT ACTIVITIES; NMAG; SERVICE SCHOOL		

CAREER PROGRAM: MARINE OPERATIONS		CONTROL BRANCH: TRANSPORTATION											
WARRANT OFFICER SERVICE (YEAR)		2	4	6	8	10	12	14	16	18	20	22	
CAREER PHASES		← PHASE #1 →		← PHASE #2 →		← PHASE #3 →		← PHASE #4 →					
TRAINING PATTERN		<div>NOTE 1</div> <div>NOTE 2</div> <div>NOTE 3</div>											
SKILL		MASTER (250 TONS); 1st MATE (500 TONS); 2nd MATE (750 TONS); 3rd MATE (UNLIMITED) - NOS 561E <div>MASTER (500 TONS); 1st MATE (750 TONS); 2nd MATE (UNLIMITED) - NOS 561D</div> <div>MASTER (750 TONS); 1st MATE (UNLIMITED) - NOS 561C</div> <div>MASTER (UNLIMITED) - NOS 561B</div>											
ACQUISITION PATTERN													
UTILIZATION PATTERN		3rd MATE - BEACH DISCHARGE LIGHTER; LARGE TUG (DIESEL ELECTRIC) MASTER - LANDING CRAFT UTILITY; TUG (65 FT); BARGE; REEFER; CRANE (FLOATING) <div>2nd MATE - BEACH DISCHARGE LIGHTER; LARGE TUG (DIESEL ELECTRIC)</div> <div>1st MATE - FREIGHT SERVICE VESSEL; CLASS "Y" TANKER</div> <div>MASTER - LARGE TUG, HARBOR (LT)</div> <div>1st MATE - BEACH DISCHARGE LIGHTER; LARGE TUG (DIESEL ELECTRIC)</div> <div>MASTER - FREIGHT SERVICE VESSEL; CLASS "Y" TANKER</div> <div>MASTER - UNLIMITED</div> <div>PILOT - UNLIMITED</div> <div>INSTRUCTOR - US ARMY TRANSPORTATION CENTER AND SCHOOL</div> <div>ADVISOR - ARMY RESERVE HARBORCRAFT UNITS</div>											

NOTES 1,2,3. UP-GRADE TRAINING.

CAREER PROGRAM: MARINE OPERATIONS	
WARRANT OFFICER SERVICE (YEAR)	CONTROL BRANCH: TRANSPORTATION
CAREER PHASES	2      4      6      8      10      12      14      16      18      20      22 ← PHASE #1 → PHASE #2 → PHASE #3 → PHASE #4 →
TRAINING PATTERN	NOTE 1      NOTE 2      NOTE 3
SKILL	CHIEF ENGINEER (600 HP); 1st ASST ENGINEER (1250 HP); 2nd ASST ENGINEER (1800 HP); 3rd ASST ENGINEER (UNLIMITED) - NOS 5645 CHIEF ENGINEER (1250 HP); 1st ASST ENGINEER (1800 HP); 2nd ASST ENGINEER (UNLIMITED) - NOS 5650 CHIEF ENGINEER (1800 HP); 1st ASST ENGINEER (UNLIMITED) - NOS 5655 CHIEF ENGINEER (UNLIMITED) - NOS 5660
ACQUISITION PATTERN	3rd ASST ENGINEER - BLACK DISCHARGE LIGHTS; TWO (DIESEL, ELECTRIC) CHIEF ENGINEER - LANDING CRAFT UTILITY TWO (65 FT); BARGE; REEFER; CRANE (FLAMING) 2nd ASST ENGINEER - BLACK DISCHARGE LIGHTS; TWO (DIESEL, ELECTRIC) 1st ASST ENGINEER - FREIGHT SERVICE VESSEL; LARGE TWO, HUBER; CLASS "T" SHIP CHIEF ENGINEER - LARGE TWO, HUBER 1st ASST ENGINEER - BLACK DISCHARGE LIGHTS; TWO (DIESEL, ELECTRIC) CHIEF ENGINEER - FREIGHT SERVICE VESSEL; CLASS "T" SHIP CHIEF ENGINEER - UNLIMITED INSTRUCTOR - US ARMY TRANSPORTATION CENTER AND SCHOOL ADVISOR - US ARMY READING HUBER/CAFT UNIT
UTILIZATION PATTERN	NOTES 1, 2, 3. UP-GRADE TRAINING

CAREER PROGRAM: MECHANICAL MAINTENANCE		CONTROL BRANCH: SEE NOTE	
WARRANT OFFICER SERVICE (YEAR)		2 4 6 8 10 12 14 16 18 20 22	
CAREER PHASES	<div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	ENTRY COURSE (ALL NOS)   MECHANICAL MAINTENANCE CAREER COURSE		
SKILL	ARMAMENT REPAIR TECHNICIAN - NOS 421A		
ACQUISITION	ORDNANCE SHOP TECHNICIAN - NOS 441A		
PATTERN	ENGINEER EQUIPMENT REPAIR TECHNICIAN - NOS 621A		
	AUTOMOTIVE MAINTENANCE TECHNICIAN - NOS 631A		
	AUTOMOTIVE REPAIR TECHNICIAN		
UTILIZATION	NOS 421A, 441A - DIRECT SUPPORT MAINTENANCE UNITS/ACTIVITIES		
PATTERN	NOS 621A - ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE UNITS/ACTIVITIES		
	NOS 631A - INSTALLATION MOTOR POOLS; TRANSPORTATION TRUCK COMPANIES; OTHER UNITS HAVING ONLY WHEEL VEHICLES		
	NOS 421A, 441A, 621A, 631A - GENERAL SUPPORT/DEPOT MAINTENANCE UNITS/ACTIVITIES (ALSO DIRECT SUPPORT MAINTENANCE UNITS/ACTIVITIES FOR NOS 632A)		
	NOS 631A - MANOEUVRE BATTALIONS AND OTHER UNITS HAVING A MIX OF WHEEL AND TRUCK VEHICLES		
	NOS 421A, 441A, 621A, 631A, 632A - SERVICE SQUADS, BATTALIONS, REGTS AND DIVISIONS		
	ACTIVITIES		

NOTE: ENGINEER (NOS 621A)  
ORDNANCE (NOS 421A, 441A, 631A, 632A)

CAREER PROGRAM: MEDICAL EQUIPMENT MAINTENANCE		CONTROL BRANCH: THE SURGEON GENERAL	
WARRANT OFFICER SERVICE (YEAR)		2 4 6 8 10 12 14 16 18 20 22	
CAREER PHASES	<div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	<div>NOTE 1</div> <div>NOTE 2</div>		
SKILL ACQUISITION PATTERN	<div>MEDICAL EQUIPMENT REPAIR TECHNICIAN - MOS 202A</div>		
UTILIZATION PATTERN	<div> <div>MEDICAL EQUIPMENT REPAIR TECHNICIAN - CLASS I HOSPITALS; FIELD AMB DEPTS</div> <div> <div>MEDICAL EQUIPMENT REPAIR TECHNICIAN - SPECIALIZED TREATMENT HOSPITALS; COMUS AND COME DEPTS; SEPARATE MEDICAL MAINTENANCE DETACHMENTS; MEDICAL RESEARCH LABORATORIES; SERVICE SCHOOL</div> <div>MEDICAL EQUIPMENT REPAIR TECHNICIAN - CLASS II HOSPITALS; COMUS AMB MEDICAL CENTERS; NATIONAL MAINTENANCE POINT; NMAG</div> </div> </div>		

NOTE 1. MEDICAL EQUIPMENT MAINTENANCE COURSE IS REQUIRED PRIOR TO OR IMMEDIATELY SUBSEQUENT TO APPOINTMENT.  
NOTE 2. EQUIPMENT MANUFACTURERS' COURSES PROVIDED ON AS-REQUIRED BASIS.

<b>CAREER PROGRAM: METEOROLOGY</b>	
<b>WARRANT OFFICER SERVICE (YEAR)</b>	<b>CONTROL BRANCH: FIELD ARTILLERY</b>
<b>CAREER PHASES</b>	<div style="text-align: center;"> </div>
<b>TRAINING PATTERN</b>	NOTE 1
<b>SKILL ACQUISITION PATTERN</b>	METEOROLOGIST TECHNICIAN - NOV 201A
<b>UTILIZATION PATTERN</b>	<div style="border: 1px solid black; padding: 5px;">         METEOROLOGIST TECHNICIAN - SEPARATE ARTILLERY GUN OR ROCKET BATTALION; DIVISION ARTILLERY          METEOROLOGIST TECHNICIAN - TARGET ACQUISITION BATTALION; COMP'S ON FIELD FORCE ARTILLERY          METEOROLOGIST TECHNICIAN - TEST AND EVALUATION ACTIVITIES; SERVICE SCHOOL       </div>

NOTE 1. BALLISTICS METEOROLOGY REFRESHER COURSE PROVIDED ON AS-REQUIRED BASIS.

CAREER PROGRAM: MILITARY INTELLIGENCE	
WARRANT OFFICER SERVICE (YEAR)	CONTROL BRANCH: MILITARY INTELLIGENCE
CAREER PHASES	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div> <div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>
TRAINING PATTERN	NOTES 1, 2, 3  MILITARY ATTACHE TECHNICAL ASSISTANT - NOS 963A  IPAGE INTERPRETATION TECHNICIAN - NOS 962A  BRISQWER OF WAR INTERPRETATION TECHNICIAN - NOS 963A  ORDER OF BATTLE TECHNICIAN - NOS 964A
SKILL ACQUISITION PATTERN	
UTILIZATION PATTERN	NOS 963A - SINGLE SERVICE ATTACHE POSTS  NOS 962A - INTERPRETATION TEAM/SECTION IN SUPPORT OF SEPARATE BRIGADES, ARMORED CAVALRY REGIMENTS OR DIVISIONS  <div> <div>NOS 963A - DUAL SERVICE AND SMALL TRI-SERVICE ATTACHE POSTS</div> <div>NOS 962A - MILITARY INTELLIGENCE DETACHMENT IN SUPPORT OF CORPS, INFANTRY DETACHMENT</div> </div> <div> <div>NOS 963A - TRI-SERVICE AND SMALLER SENSITIVE ATTACHE POSTS; DEFENSE INTELLIGENCE AGENCY</div> <div>NOS 962A - INFANTRY DETACHMENT; US ARMY INTELLIGENCE SCHOOL</div> </div> NOS 963A, 964A - RANDOM ASSIGNMENTS TO MILITARY INTELLIGENCE TEAM, SECTIONS, DETACHMENTS, AND PLATFORMS AND TO THE US ARMY INTELLIGENCE SCHOOL.  NOTE 1. DEFENSE INTELLIGENCE ATTACHE STAFF COURSE PROVIDED FOR NOS 963A ON AS-REQUIRED BASIS. NOTE 2. DEFENSE SENIOR INTERPRETATION AND APPLICATIONS COURSE PROVIDED FOR NOS 962A ON AS-REQUIRED BASIS. NOTE 3. LANGUAGE TRAINING PROVIDED FOR NOS 963A ON AS-REQUIRED BASIS.

CAREER PROGRAM: MILITARY MUSIC	
WARRANT OFFICER SERVICE (YEAR)	CONTROL BRANCH: ADJUTANT GENERAL
CAREER PHASES	2      4      6      8      10      12      14      16      18      20      22 ← PHASE #1 →      ← PHASE #2 →      ← PHASE #3 →
TRAINING PATTERN	NOTES 1, 2
SKILL ACQUISITION PATTERN	BANDMASTER - MOS 031A
UTILIZATION PATTERN	BANDMASTER - POST/CAMP/STATION BANDS BANDMASTER - DIVISION BANDS BANDMASTER - ORGANIZATION BANDS AT ARMY HEADQUARTERS AND MAJOR COMMAND LEVEL ASSOCIATE BANDMASTER - THE ARMY BANDS SPECIAL BANDS NOTE 1. BANDMASTER COURSE REQUIRED PRIOR TO APPOINTMENT EXCEPT FOR THOSE APPOINTED IN USA AND WMA WITHOUT CONCURRENT ACTIVE DUTY. ATTENDANCE FOR THESE INDIVIDUALS IS REQUIRED IF SUBSEQUENTLY CALLED TO ACTIVE DUTY. NOTE 2. SPECIAL COURSES AT CIVILIAN INSTITUTIONS PROVIDED ON AS-REQUIRED BASIS.



CAREER PROGRAM: MISSILE SYSTEMS MAINTENANCE		CONTROL BRANCH: ORDNANCE	
WARRANT OFFICER SERVICE (YEAR)		2	4 6 8 10 12 14 16 18 20 22
CAREER PHASES	<div> <div>← PHASE #1 →</div> <div>← PHASE #2 →</div> <div>← PHASE #3 →</div> </div>		
TRAINING PATTERN	<div> <div>MISSILE SYSTEM MAINTENANCE INTERMEDIATE COURSE</div> <div>MISSILE SYSTEM MAINTENANCE ADVANCED COURSE</div> </div>		
SKILL	<div>FIELD ARTILLERY MISSILE SYSTEM TECHNICIAN, PERISHING - MOS 214E</div>		
ACQUISITION PATTERN	<div> <div>FIELD ARTILLERY MISSILE SYSTEM TECHNICIAN, SERGEANT - MOS 214F</div> <div>FIELD ARTILLERY MISSILE SYSTEM REPAIR TECHNICIAN, PERISHING - MOS 241F</div> <div>FIELD ARTILLERY MISSILE SYSTEM REPAIR TECHNICIAN, SERGEANT - MOS 241E</div> </div>		
UTILIZATION PATTERN	<div> <div>MOS 214E - PERISHING FIRING BATTERY</div> <div>MOS 214F - SERGEANT FIRING BATTERY</div> <div>MOS 214E &amp; 214F - WAREHOUSING SUPPORT DETACHMENT</div> <div> <div>MOS 214E &amp; 214F - FIELD ARTILLERY CENTER AND SCHOOL, TRAINING BRIGADE (FIELD ARTILLERY CENTER)</div> <div>MOS 241E &amp; 241F - MISSILE AND MUNITING CENTER AND SCHOOL, SERGEANT OR PERISHING BATTALION, COMBUSTION AND MAINTENANCE AGENCIES</div> <div> <div>MOS 214E &amp; 214F - FIELD ARTILLERY CENTER AND SCHOOL, TRAINING BRIGADE (FIELD ARTILLERY CENTER)</div> <div>FIELD ARTILLERY BOARD, FIELD ARTILLERY MISSILE SYSTEM EVALUATION GROUP, ORC OR PROJECT MANAGER</div> <div> <div>MOS 241E &amp; 241F - MISSILE AND MUNITING CENTER AND SCHOOL, FIELD ARTILLERY BOARD, FIELD ARTILLERY MISSILE SYSTEM EVALUATION GROUP, ORC OR PROJECT MANAGER</div> </div> </div> </div> </div>		

CAREER PROGRAM: MISSILE SYSTEMS MAINTENANCE		CONTROL BRANCH: SEE NOTE	
WARRANT OFFICER SERVICE (YEAR)		2      4      6      8      10      12      14      16      18      20      22 ← PHASE #1 →      ← PHASE #2 →      ← PHASE #3 →	
CAREER PHASES			
TRAINING PATTERN	MISSILE SYSTEMS MAINTENANCE INTERMEDIATE COURSE		
SKILL	AIR DEFENSE MISSILE ASSEMBLY TECHNICIAN, NITE - NOS 2218 AIR DEFENSE MISSILE FIRE CONTROL TECHNICIAN - NOS 2228 AIR DEFENSE MISSILE SYSTEM TECHNICIAN, NAW - NOS 223C		
ACQUISITION PATTERN	AIR DEFENSE MISSILE SYSTEM REPAIR TECHNICIAN, NITE - NOS 2518 AIR DEFENSE MISSILE SYSTEM REPAIR TECHNICIAN, NAW - NOS 251C LAND COMBAT SUPPORT MISSILE SYSTEM TECHNICIAN - NOS 271A		
UTILIZATION PATTERN	NOS 2218 & 2228 - NITE FALCON BATTERY NOS 223C - NAW FALCON BATTERY NOS 271A - LAND COMBAT SUPPORT SYSTEMS MAINTENANCE DETACHMENT (DIRECT SUPPORT/GENERAL SUPPORT) NOS 2218, 2228, 223C - AIR DEFENSE ARTILLERY CENTER AND SCHOOL, NAW NOS 2518, 251C - DIRECT SUPPORT/GENERAL SUPPORT MAINTENANCE UNIT, MISSILE AND MISSILE CENTER AND SCHOOL, NAW NOS 271A - DIRECT SUPPORT/GENERAL SUPPORT MAINTENANCE DETACHMENT, MISSILE AND MISSILE CENTER AND SCHOOL NOS 2218, 2228, 223C - AIR DEFENSE ARTILLERY CENTER AND SCHOOL, GROUP AND HIGH SCHOOL, NAW NOS 2518, 251C, 271A - MISSILE AND MISSILE CENTER AND SCHOOL, MISSILE CENTER AND SCHOOL, NAW NOS 271A - MISSILE AND MISSILE CENTER AND SCHOOL, MISSILE CENTER AND SCHOOL, NAW		

NOTE: AIR DEFENSE ARTILLERY (NOS 2218, 2228, 223C)  
ORDINANCE (NOS 2518, 251C, 271A)

CAREER PROGRAM: NUCLEAR POWER PLANT OPERATION		CONTROL BRANCH: ENGINEER	
WARRANT OFFICER SERVICE (YEAR)			
CAREER PHASES	<div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> <div>12</div> <div>14</div> <div>16</div> <div>18</div> <div>20</div> <div>22</div> </div> <div> <div>PHASE #1</div> <div>PHASE #2</div> <div>PHASE #3</div> </div>		
TRAINING PATTERN	NOTE 1		
SKILL ACQUISITION PATTERN	NUCLEAR POWER PLANT TECHNICIAN - NOS 351A		
UTILIZATION PATTERN	<p>ASSIGNMENTS ARE LIMITED TO A FEW LOCATIONS AND INCLUDE THE US NAVY ENGINEER REACTOR GROUP (PORT BELANGER), THE IDAMO NUCLEAR POWER FIELD OFFICE, THE NUCLEAR POWER PLANT FACILITY AT PORT SMELLY, ALASKA, AND OTHER DESIGNATIONS TO WHICH FLOATING POWER PLANTS MAY BE STATIONED.</p> <p>NOTE 1. REFRESHEN TRAINING PROVIDED AS REQUIRED.</p>		

CAREER PROGRAM: UTILITIES MAINTENANCE	
WARRANT OFFICER SERVICE (YEAR)	CONTROL BRANCH: ENGINEER
	2 4 6 8 10 12 14 16 18 20 22
CAREER PHASES	<div> <div>← PHASE #1 →</div> <div>← PHASE #2 →</div> <div>← PHASE #3 →</div> </div>
TRAINING PATTERN	NOTE 1
SKILL	
ACQUISITION PATTERN	UTILITIES MAINTENANCE TECHNICIAN - NOS 521A
UTILIZATION PATTERN	<p>ASSIGNMENTS ARE GENERALLY TO THE UTILITIES MAINTENANCE SECTION OF POST ENGINEER ORGANIZATIONS AND TO UTILITIES MAINTENANCE DETACHMENTS IN SUPPORT OF ARMY HOSPITALS AND OTHER FIXED INSTALLATIONS.</p> <p>NOTE 1. POST ENGINEER MANAGEMENT COURSE PROVIDED ON AS-REQUIRED BASIS.</p>

# WARRANT OFFICER MILITARY TRAINING PROGRAM

Career Program	Progression Ladder	MOS	Title	Career Phase	Military Schooling	
					Title	Length
Administration	Personnel Administration	711A	Unit Personnel Technician	1-3	Mil Pers Officer	5 wks
		712A	General Staff Admin Technician	3	Unit Pers Technician	
	Legal Administration	713A	Legal Admin Technician	1-3	Legal Admin Asst	2 wks
Airdrop Operations		461A	Airdrop Equipment Repair Technician	1	Parachute Rigger	12 wks
		411A	Ordnance Ammunition Tech	1-3	Maint & Repair Officer	8 wks
	Nuclear Weapons	261A	Nuclear Weapons Assembly & Maint Tech	1	Nuclear Weapons Assembly	5 wks
		262A	Nuclear Weapons Electronic Technician	1	Nuclear Weapons Electronics	18 wks
Aviation Operations	Aircraft Piloting	261A 262A	Cross Trained	2-3	Nuclear Weapons Maintenance (261A & 262A)	12 wks 8 wks
		100B	RW Pilot, Observation, Utility, light cargo	1	WORMAC	33 wks
		100C	RW Pilot, Medium Transport	1-3	WORMAC	36 wks
		100D	RW Pilot, Heavy Transport	1-3		varies
		100E	RW Pilot, Attack	1-3		
		101B	FW Pilot, Single Engine	1		
		101C	FW Pilot, Multi-Engine	1-3		
		101D	FW Pilot, Surveillance	2-3		
		102A	Acft FWRW Pilot (Dual rated)	2-3		
		671B	Acft Repair Tech (non-rated)	1-3	Acft Maintenance	13 wks
	Aircraft Repair	671C	Acft Repair Tech (RW, rated)	2-3		
		671D	Acft Repair Tech (FW, rated)	2-3		
		671E	Acft Repair Tech (Dual rated)	2-3		

Career Program	Progression Ladder	MOS	Title	Military Schooling		
				Career Phase	Title	Length
Communications-Electronics Maintenance		281A	Radio Repair Tech	1	Signal Equip. Maint. & Repair	10 wks
		282A	Radio Repair Tech	1		
		284A	TV Repair Tech	1-3		
		286A	Communications-Electronics Repair Tech	1-3		
		741E	Tele communications automation software tech	2-3		
Communications-Electronics Intelligence		051A	Morse Intercept Tech	1-3		varies
		052A	Non-Morse Intercept Tech	1-3		
		053A	Special Identification Tech	1-3		
		283A	Electronic Warfare Repair Tech	1-3		
		285A	Intercept Repair Tech	1-3		
		961A	Cryptoanalytic Tech	1-3		
		962A	Traffic Analysis Tech	1-3		
		963A	Communications Analysis Tech	1-3		
Criminal Investigation		938A	Voice Intercept Tech	1-3		
		951A	Criminal Investigator	1-3	Criminal Investigation	8 wks
		651C	Questioned Document Examiner	1-3	Polygraph Examiner	11 wks
		951D	Firearms Identification Examiner	2-3	Firearms Examiner	10 wks
		951E	Fingerprint Examiner	2-3	Laboratory Tech	
		951F	Polygraph Evidence Tech	2-3	Specialist	
		951G	Criminal Laboratory Criminal Analysis Tech	2-3	Criminal Investigation	8 wks
Cryptography		741A	Cryptographic Equipment Repair technician	1-3	Communications Center Operation	8 wks
		721A	Cryptographic Tech	1-3		

Career Program	Progression Ladder	MOS	Title	Career Phase	Military Schooling Title	Length
Data Processing		741B	Data Processing Tech, ZAM	1	Auto Data Processing	4 wks
		741C	Data Processing Tech	1		
		741D	Data Processing Tech, Programmer	1		
Data Processing Equipment Repair	Data Processing Equipment	225B	Data Processing Maint. Tech Safeguard	1-3	Safeguard DPS Maint Tech	42 wks
		302A	Data Processing Equipment Repair Tech	1		
		361A	Fire Distribution Systems Repair Tech	1		
Field Artillery Equip Operation		211A	FA Repair Technician	1	FA Repair Tech	2 wks
Food Service (One Ladder) Forward Air Defense Systems Maint General Intelligence	(two ladders)	241A	Food Service Technician	1-3	Food Technician	12 wks
		224B	Chapparal/Vulcan System Tech	1-3	Chapparal/Vulcan System Tech	16 wks
		221C	Missile Maint Tech Safeguard	1-3	can System Tech Safeguard Missile Maint Tech	30 wks
		971A	Counterintelligence Tech	1-3	Defense Against Methods of Entry (Varies)	3 wks
		972A	Area Intelligence Tech	1-3	Defense Against Sound Equipment	9 wks
General Supply	Reproduction	971A-972A	(Cross-trained)		Polygraph Examiner	11 wks
					Invest Photo-graphy	8 wks
					Intel Research	15 wks
					Area Intel	19 wks
					Supply Mgmt	9 wks
		761A	Unit Supply Technician	1-3		
		762A	Repair Parts Supply Tech (proposed)	2-3		
		821A	Survey Technician	1-3		
		611A	Photo Supply Technician	1-3		
		831A	Map Reproduction Tech	1-3		
		832A (New)	PSYOP Reproduction Tech	1		

Career Program	Progression Ladder	MOS	Title	Career Phase	Military Schooling	
					Title	Length
Medical assistance Mechanical Maintenance	Dock Operations	56iE	Master, 250 Ton Vessel	1	Harbor Craft Deck Operations	17 wks
			1st Mate, 500-ton vessel 2nd Mate, 150-ton vessel 3rd Mate, unlimited			
		562E	Chief Engineer, 600 hp 1st asst Engineer, 1250 hp; 2d asst Engineer, 1800 hp; 3d asst Engineer, unlimited	1	Harbor Craft Engine Operations	17 wks
	one ladder	911A	Medical technician	1-3	Medical Assist tech	72 wks
		421A	Repair Tech	1-3	WO supervisory/technical training	18 wks
Medical Equip Maint.	One ladder	441A	Shop Tech	1-3		
		631A	Automotive Maint Tech	1-3		
		632A	Automotive Repair Tech	2-3	Organizational Maintenance	8 wks
		671A	Engineer Equip Repair Tech	1-3	Engineer Equip Repair	11 wks
		202A	Medical equipment repair technician	1-3	Medical equip. maint	33 wks
Meteorology	One ladder	201A	Meteorology technician	1-3	Artillery ballistic meteorology	9 wks
Military Intelligence		961A	Military Attache Technical Assistant	1-3	Attache Staff	11 wks
		962A	Image Interpretation Tech	1-3	Defense Sensor Interpretation and application training foreign language(varies)	12 wks
		963A	POW Interrogation Tech	1	Foreign language	varies
		964A	Order of Battle Tech	1		



Career Program	Progression Ladder	MOS	Title	Career Phase	Military Schooling	
					Title	Length
Military Missile Systems Maintenance	One ladder	031A	Bandmaster	1-3	WO Bandmaster	17 wks
		214E	PA Missile System Tech	1-3	Pershing System maintenance	13 wks
	Surface-to-surface	214P	PA Missile System Tech	1-3	Sargeant Missile Battery	5 wks
		241E	PA Missile System Repair Tech Sgt	2-3	Ballistic Missile Maintenance Tech Sgt	39 wks
	Surface-to-Air	241P	PA Missile System Repair Tech Persh	2-3	Ballistic Maint Tech	35 wks
		226B	Missile Rite Radar Maint Tech	1-3		
		226C	Periacter Acquisition Radar Maint Tech	1-3		
		221B	AD Missile Assembly Tech NIKE	1-3	Missile Site Radar Tech	45 wks
		222B	AD Missile Fire Control Tech, Nike	1-3	Periacter Acquisition Radar	35 wks
		223C	AD Missiles Systems Tech, Hawk	1-3	Nike Hercules Electronic Maint.	25 wks
Nuclear Power Plant Operation Open Mess Operation Utilities Maint.		251B	AD Missile Systems Repair Tech, Nike	2-3	Improved Nike Hercules Fire Control System	48 wks
		251C	AD Missile Systems Repair Tech, Hawk	2-3	AD Missile Maint. Tech, Nike	54 wks
		271A	Land Combat Support Missile Systems Repair Tech	1-3	AD Missile Maint. Tech, Hawk	46 wks
		351A	Nuclear Power Plant	1	Land Combat Support Missile System Repair	34 wks
		021A	Open Mess Custodian	1-3	Open Mess Operation	7 wks
		521B	Utilities Maint Tech	1-3		
		521C	Tactical Support Equipment Maintenance Tech, Safeguard	1-3		

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